

Best Management Practices

MISSOURI DEPARTMENT OF CONSERVATION



Geocarpon

Geocarpon minimum

Common name • Geocarpon

Scientific name • *Geocarpon minimum*

Federal status • Threatened

State status • Endangered

Ecology

Geocarpon is a small succulent plant that grows to about 1.5 inches tall. It is an annual that germinates in November and overwinters as a tiny rosette. Plants bloom the following spring from mid-March to early May, and die 4-6 weeks later, after seed set. Geocarpon grows on Channel Sandstone glades and outcrops in shallow sandy depressions, where not crowded out by deeper-rooted plants. In Missouri, Geocarpon is found in Dade, Polk, Greene, Cedar, Lawrence, Henry and St. Clair counties.

Reasons for Decline

Geocarpon is threatened by conversion of glade habitat to non-native species such as cool season pasture grasses. Grazing may lead to nitrification of the sandy depressions and crowding out by other species. Woody invasion of glades, and accumulation of leaf litter can also have detrimental effects on geocarpon. Excessive off-road vehicle use is also a threat, causing destruction of plants during the early spring growing season.

Specific Recommendations

Projects planned within the seven-county Missouri range of geocarpon should include a review of affected areas for the presence of Channel Sandstone exposure. If found, these habitats should be surveyed for geocarpon between March 1 and June 1.

→ Maintain native vegetation on sandstone glades by cutting to control woody invasion and by prescribed burning.

→ Avoid herbicide use on glades except during the period of July through September when geocarpon exists only as a seed bank. Monocot-specific herbicides may be applied through spot application at other times.

→ Limit construction activities to deeper soil areas, away from sandstone exposures.

→ Avoid heavy use of glades by grazing livestock, although some level of periodic disturbance should benefit geocarpon.

Information Contacts

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Disclaimer

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